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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/599,355      | 06/21/2000  | Mark Edward Pecan    | CS10877             | 7184             |

7590 03/25/2004

Ray Warren MCS  
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Libertyville, IL 60048

EXAMINER

TORRES, MARCOS L

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2683

DATE MAILED: 03/25/2004

*Handwritten signature/initials*

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/599,355

Applicant(s)

PECEN ET AL.

Examiner

Marcos L Torres

Art Unit

2683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2683

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-5, 7, 9-10, 12-13, 15-17 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pecan (6,529,525) in view of Kronestedt.

Art Unit: 2683

As to claim 1, Pecen discloses a communication system including a mobile station sending a plurality of uplink radio link control data blocks to a base station in an uplink temporary block flow, and receiving a plurality of downlink radio link control data blocks from the base station (see abstract) in a downlink temporary block flow (see col. 1, lines 43-44), comprising: a protocol control unit within the base station (see col. 2, lines 1), having a base station sending an identifier during setup of the downlink temporary block flow, and sending an uplink state flag indicating channel availability in a first one of the plurality of downlink radio link control data blocks; and a GPRS/EDGE subsystem within the mobile station, having a mobile station receiving the identifier and the uplink state flag (see col. 8, lines 32-54), and sending uplink data in a first one of the plurality of uplink radio link control data blocks to the base station in response to the uplink state flag indicating channel availability, wherein the base station sends a directed acknowledgement in a subsequent one of the plurality of downlink radio link control data blocks in response to receipt of the uplink data from the mobile station, and the mobile station sends uplink data in a second one of the plurality of uplink radio link control data blocks in response to the directed acknowledgement (see col. 5, line 66 – col. 54). Pecen do not specifically disclose the base station or the mobile station using medium access control layer. Kronestedt discloses using medium access control layer in a wireless communication system (see col. 1, lines 24-25). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to add this teaching to the Pecen system for the simple purpose of compatibility.



As to claim 2, Pecen discloses a communication system including a first station sending a plurality of uplink data blocks to a second station in an uplink temporary block flow, and receiving a plurality of downlink data blocks from the second station in a downlink temporary block flow (see abstract), comprising: a protocol control unit within the second station (see col. 2, lines 1), which sends an identifier during setup of the downlink temporary block flow, and sends an uplink state flag indicating channel availability in a first one of the plurality of downlink data blocks; and a packet data subsystem within the first station, which receives the identifier and the uplink state flag (see col. 8, lines 32-54), and sends uplink data in a first one of the plurality of uplink data blocks to the second station in response to the uplink state flag indicating channel availability, wherein the second station sends a directed acknowledgement in a subsequent one of the plurality of downlink data blocks in response to receipt of the uplink data from the first station, and the first station sends uplink data in a second one of the plurality of uplink data blocks in response to the directed acknowledgement (see col. 5, line 66 – col. 54). Pecen do not specifically disclose the base station or the mobile station using medium access control layer. Kronestedt discloses using medium access control layer in a wireless communication system (see col. 1, lines 24-25). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to add this teaching to the Pecen system for the simple purpose of compatibility.

As to claims 3, 12 and 19, Pecen discloses a communication system wherein the first station is a mobile station and the second station is a base station in a radio communication system (see col. 4, lines 1-11).

As to claims 4, 13 and 20, Pecen discloses a communication wherein the radio communication system includes a Global System for Mobile (GSM) communication system with General Packet Radio Service (GPRS) and Enhanced Data for Global Evolution (EDGE) (see col. 1, lines 15-26).

As to claims 5, 9-10 and 16-17, Pecen discloses a communication wherein the downlink data blocks include downlink radio link control data blocks, and the uplink data blocks include uplink radio link control data blocks (see col. 6, lines 18-32).

Regarding claims 7 and 15, they are the corresponding method claims of system claims 1 and 2. Therefore, claims 7 and 15 they are rejected for the same reason shown above.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pecen in view of Kronstedt as applied to claims 1-5, 7, 9-10, 12-13, 15-17 and 19-20 above, and further in view of Pecen (6,282,182).

As to claim 8, Pecen discloses a method of comparing the value of the uplink state flag, then incrementing to the next uplink data block to be transmitted in the first station after sending an uplink data block (see col. 8, line 32 – col. 10, line 48). Pecen discloses wherein if the value of the uplink state flag corresponds to the address assigned to the first station (see col. 1, line 65 – col. 2, line 14). Therefore, it would have



Art Unit: 2683

been obvious to one of the ordinary skill in the art at the time of the invention to add this teaching for a reliable delivery of data.

6. Claims 6, 11, 14 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pecen in view of Kronestedt as applied to claims 1-5, 7, 9-10, 12-13, 15-17 and 19-20 above, and further in view of Wang.

As to claims 6 and 14, Pecen discloses everything claimed as explained above except for a communication system wherein at least some of the downlink data blocks and the uplink data blocks include packetized voice data. Wand discloses a communication system wherein at least some of the downlink data blocks and the uplink data blocks include packetized voice data (see col. 4, lines 27-31). Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to add this technique for bandwidth management purposes.

As to claims 11 and 18, Pecen discloses everything claimed as explained above except for a method in wherein a value of zero for the uplink state flag is indicative that the uplink channel is available. However, OFFICIAL NOTICE IS TAKEN THAT the use of zero or null character to indicate no use, empty or available is a common and well-known technique. Therefore, it would have been obvious to one of the ordinary skill in the art at the time of the invention to use this technique to indicate availability.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Pecen U.S. Patent US006631259B2

b. Balachandran U.S. Patent US006625133B1

Any response to this Office Action should be mailed to:

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For formal communication intended for entry, informal communication or draft communication; in the case of informal or draft communication, please label "PROPOSED" or "DRAFT"

Hand delivered responses should be brought to:

Crystal Park II  
2121 Crystal Drive  
Arlington, VA  
Sixth Floor (Receptionist)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marcos L Torres whose telephone number is 703-305-1478. The examiner can normally be reached on 8:00am-5:30pm alt. friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William G Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

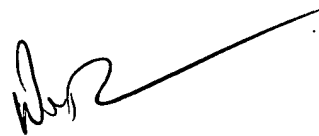


Art Unit: 2683

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marcos L Torres  
Examiner  
Art Unit 2683

Mlt

A handwritten signature in black ink, appearing to read 'W. Trost', with a long, sweeping horizontal line extending to the right.

**WILLIAM TROST  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600**